

## Annexure 1

### 1. Description

- 1.1 Supply, Erection, Testing and Commissioning of Compressed air Pipe line system including laying of pipeline in newly extended shed of Body Repair shop, Final, Paint and Carpentry with ETL shop at CRWS/BPL.

### 2. Technical Scope of Work

**A. Body Shop:** Supply & laying of following materials as per sketch no. MW/Pn.Pipeline /Body/CRWS:

| Sr.No | Description   | Specification / make   | Quantity required                |
|-------|---|--|----------------------------------|
|       | <b>Pipe</b>   |  |                                  |
| 1     | Seamless pipe 100 NB  | As per IS:1239 Part (1) / 1990, 6.2 a, or IS:1239 Part (1)/2004 of 6.3 a i.e. HSF manufactured from hot role steel confirming to IS:10748 : 1984<br><br>OR<br>SEAMLESS carbon steel pipe to specification ASTM A 106 Gr B of Jindal/Kalyani steel/Hitesh steel/Tata steel/ Evergreen seamless pipes. | 300mtrs                          |
| 2     | Seamless pipe 25 NB   | ---DO---   | 75 Mtrs.                         |
| 3     | Seamless pipe 20 NB   | ---DO---   | 15 Mtrs.                         |
| 4     | Seamless pipe 15 NB   | ---DO---   | 10 Mtrs.                         |
|       | <b>Flange</b>   |  |                                  |
| 5     | Cast Steel WNRF (Weld Neck Raise Face) Flange 100NB                               | As per IS 1030   | 20 pair                          |
|       | <b>Valve</b>  |  |                                  |
| 6     | Cast Iron, Outside Screw & Yoke Type Bolted Bonnet Gate Valve 100 NB              | Make<br>OSCAR/ADUCO/VANAZ  | 04 Nos.                          |
| 7     | Cast Iron ASA 125 Class, Outside Screw & Yoke Type Bolted Bonnet Gate Valve 25 NB | --DO--   | 15 Nos.                          |
| 8     | Cast Iron ASA 125 Class, Outside Screw & Yoke Type Bolted Bonnet Gate Valve 20 NB | --DO--   | 30 Nos.                          |
| 9     | Cast Iron ASA 125 Class, Outside Screw & Yoke Type Bolted Bonnet Gate Valve 15 NB | --DO--   | 02 Nos.                          |
| 10    | FRL (Filter + Regulator + Lubricator with pressure Gauge) Size: 20NB              | Make AIRMAX/AUDCO/CP   | 05 Nos.                          |
| 11    | Angle Iron 65x65x6mm  | As per IS 2062   | 2.34 Kg.* 50<br>Support= 117 Kg. |
| 12    | U-Bolt & nut to suite pipe range 100NB to 15NB pipe                               | As per IS :1363 Part (1)   | 50 No                            |

**B. Final Shop:** Supply & laying of following materials as per sketch no. MW/Pn.Pipeline /Final/CRWS:

| Sr. No. | Description   | Specification / make   | Quantity required                  |
|---------|---|--|------------------------------------|
|         | <b>Pipe</b>   |  |                                    |
| 1       | Seamless pipe 50 NB   | As per IS:1239 Part (1) / 1990, 6.2 a, or IS:1239 Part (1)/2004 of 6.3 a i.e. HSF manufactured from hot role steel confirming to IS:10748 : 1984<br>OR<br>SEAMLESS carbon steel pipe to specification ASTM A 106 Gr B of Jindal/Kalyani steel/Hitesh steel/Tata steel/ Evergreen seamless pipes. | 185 Mtrs.                          |
| 2       | Seamless pipe 25 NB   | ---DO---   | 45 Mtrs.                           |
| 3       | Seamless pipe 20 NB   | ---DO---   | 10 Mtrs.                           |
| 4       | Seamless pipe 15 NB   | ---DO---   | 15 Mtrs.                           |
|         | <b>Flange</b>   |  |                                    |
| 5       | Cast Steel WNRF (Weld Neck Raise Face) Flange 50NB                                | As per IS 1030   | 12 pair                            |
|         | <b>Valve</b>  |  |                                    |
| 6       | Cast Iron, Outside Screw & Yoke Type Bolted Bonnet Gate Valve 50 NB               | Make OSCAR/ADUCO/VANAZ   | 02 Nos.                            |
| 7       | Cast Iron ASA 125 Class, Outside Screw & Yoke Type Bolted Bonnet Gate Valve 25 NB | --DO--   | 09 Nos.                            |
| 8       | Cast Iron ASA 125 Class, Outside Screw & Yoke Type Bolted Bonnet Gate Valve 20 NB | --DO--   | 18 Nos.                            |
| 9       | Cast Iron ASA 125 Class, Outside Screw & Yoke Type Bolted Bonnet Gate Valve 15 NB | --DO--   | 03 Nos.                            |
| 10      | FRL (Filter + Regulator + Lubricator with pressure Gauge)<br>Size: 20NB           | Make AIRMAX/AUDCO/CP   | 05 Nos.                            |
| 11      | Angle Iron 65x65x6mm  | As per IS 2062   | 2.34 Kg.* 37<br>Support= 86.58 Kg. |
| 12      | U-Bolt & nut to suite pipe range 50NB to 15NB pipe                                | As per IS :1363 Part (1)   | 37 No.                             |

**C. Paint Shop:** Supply & laying of following materials as per sketch no. MW/Pn.Pipeline /Paint/CRWS:

| Sr. No. | Description   | Specification / make   | Quantity required                  |
|---------|---|--|------------------------------------|
|         | <b>Pipe</b>   |  |                                    |
| 1       | Seamless pipe 80 NB   | As per IS:1239 Part (1) / 1990, 6.2 a, or IS:1239 Part (1)/2004 of 6.3 a i.e. HSF manufactured from hot role steel confirming to IS:10748 : 1984<br>OR<br>SEAMLESS carbon steel pipe to specification ASTM A 106 Gr B of Jindal/Kalyani steel/Hitesh steel/Tata steel/ Evergreen seamless pipes. | 135 Mtrs.                          |
| 2       | Seamless pipe 25 NB   | ---DO---   | 25 Mtrs.                           |
| 3       | Seamless pipe 20 NB   | ---DO---   | 05 Mtrs.                           |
| 4       | Seamless pipe 15 NB   | ---DO---   | 05 Mtrs.                           |
|         | <b>Flange</b>   |  |                                    |
| 5       | Cast Steel WNRF (Weld Neck Raise Face) Flange 50NB                                | As per IS 1030   | 07 pair                            |
|         | <b>Valve</b>  |  |                                    |
| 6       | Cast Iron, Outside Screw & Yoke Type Bolted Bonnet Gate Valve 80 NB               | Make OSCAR/ADUCO/VANAZ   | 01 Nos.                            |
| 7       | Cast Iron ASA 125 Class, Outside Screw & Yoke Type Bolted Bonnet Gate Valve 25 NB | --DO--   | 05 Nos.                            |
| 8       | Cast Iron ASA 125 Class, Outside Screw & Yoke Type Bolted Bonnet Gate Valve 20 NB | --DO--   | 10 Nos.                            |
| 9       | Cast Iron ASA 125 Class, Outside Screw & Yoke Type Bolted Bonnet Gate Valve 15 NB | --DO--   | 01 Nos.                            |
| 10      | FRL (Filter + Regulator + Lubricator with pressure Gauge)<br>Size: 20NB           | Make AIRMAX/AUDCO/CP   | 05 Nos.                            |
| 11      | Angle Iron 65x65x6mm  | As per IS 2062   | 2.34 Kg.* 21<br>Support= 49.14 Kg. |
| 12      | U-Bolt & nut to suite pipe range 80NB to 15NB pipe                                | As per IS :1363 Part (1)   | 21No.                              |

**D. ETL & Carpentry Shop:** Supply & laying of following materials as per sketch no. MW/Pn.Pipeline / Carpentry & ETL/CRWS:

| Sr. No. | Description   | Specification / make   | Quantity required              |
|---------|---|--|--------------------------------|
|         | <b>Pipe</b>   |  |                                |
| 1       | Seamless pipe 80 NB   | As per IS:1239 Part (1) / 1990, 6.2 a, or IS:1239 Part (1)/2004 of 6.3 a i.e. HSF manufactured from hot role steel confirming to IS:10748 : 1984<br>OR<br>SEAMLESS carbon steel pipe to specification ASTM A 106 Gr B of Jindal/Kalyani steel/Hitesh steel/Tata steel/ Evergreen seamless pipes. | 310 Mtrs.                      |
| 2       | Seamless pipe 25 NB   | ---DO---   | 45 Mtrs.                       |
| 3       | Seamless pipe 20 NB   | ---DO---   | 10 Mtrs.                       |
| 4       | Seamless pipe 15 NB   | ---DO---   | 10 Mtrs.                       |
|         | <b>Flange</b>   |  |                                |
| 5       | Cast Steel WNRF (Weld Neck Raise Face) Flange 50NB                                | As per IS 1030   | 20 pair                        |
|         | <b>Valve</b>  |  |                                |
| 6       | Cast Iron, Outside Screw & Yoke Type Bolted Bonnet Gate Valve 80 NB               | Make OSCAR/ADUCO/VANAZ   | 02 Nos.                        |
| 7       | Cast Iron ASA 125 Class, Outside Screw & Yoke Type Bolted Bonnet Gate Valve 25 NB | --DO--   | 09 Nos.                        |
| 8       | Cast Iron ASA 125 Class, Outside Screw & Yoke Type Bolted Bonnet Gate Valve 20 NB | --DO--   | 18 Nos.                        |
| 9       | Cast Iron ASA 125 Class, Outside Screw & Yoke Type Bolted Bonnet Gate Valve 15 NB | --DO--   | 02 Nos.                        |
| 10      | FRL (Filter + Regulator + Lubricator with pressure Gauge)<br>Size: 20NB           | Make AIRMAX/AUDCO/CP   | 04 Nos.                        |
| 11      | Angle Iron 65x65x6mm  | As per IS 2062   | 2.34 Kg. * 55 Support= 129 Kg. |
| 12      | U-Bolt & nut to suite pipe range 80NB to 15NB pipe                                | As per IS :1363 Part (1)   | 55 No.                         |

### 3. Contractor's Scope of Work:

The detailed scope of work is divided in 04 (Four) parts, the work should be carried out one by one starting from A to D.

A. Supply of all materials required for erection & commissioning of Compressed air Pipe line Body Shop as per section – A, and drawing Sketch given in Annexure-2.

- i. List of material for Body Shop – section 'A'
- ii. Sketch no. MW/Pn. Pipe line/Body/CRWS

3.1 Extension of existing compressed air pipe line with 100 nb pipe valve and laying of 100 nb pipe line with using at least 20 pair of flange for connection. Starting with 100 nb valve, Quantity 04 nos. Pipe line will be supported with MS Angle 65X65X6mm and U-Bolt.

3.2 Installation of 15 nos. down take of 25 nb pipe with a valve of 25 nb of 05 meter length. Pipe line will be supported with MS Angle 65X65X6mm and U-Bolt.

3.3 Installation of 02 nos. C-Section bended pipe of 20 nb with 02 nos. valve at end will be jointed on 15 nos. down take of 25 nb pipe after 25 nb valve. Pipe line will be supported with MS Angle 65X65X6mm and U-Bolt.

3.4 Installation of 02 nos. down take as per sketch given above of 15 nb pipe for MDP (Moisture drainage point) with 15 nb valve. Pipe line will be supported with MS Angle 65X65X6mm and U-Bolt.

3.5 Installation of 05 nos. FRL points nominated by consignee at 30 down takes of 20 nb.

3.6 Commissioning of all components compressed air pipe line system, the desired performance of the system shall be demonstrated by the contractor for at least two working days (02 shifts each). The pipe line shall be handed over to CRWS for trial operation for 30 days. On successful completion of such trial, commissioning certificate shall be issued by CRWS Bhopal, provided, all necessary obligations of the contract on the part of the contractor are met and the payment for this part will be made after completion of this part.

B. Supply of all materials required for erection & commissioning of Compressed air Pipe line of Final Shop as per section – B, and drawing Sketch given in Annexure-2

- i. List of material for Final Shop – section ‘B’
- ii. Sketch no. MW/Pn. Pipe line/Final/CRWS

- 3.7 Extension of existing compressed air pipe line with 50 nb pipe valve and laying of 50 nb pipe line with using at least 12 pair of flange for connection. Starting with 50 nb valve, Quantity 03 nos. Pipe line will be supported with MS Angle 65X65X6mm and U-Bolt.
- 3.8 Installation of 09 nos. down take of 25 nb pipe with a valve of 25 nb of 05 meter length. Pipe line will be supported with MS Angle 65X65X6mm and U-Bolt.
- 3.9 Installation of 02 nos. C-Section bended pipe of 20 nb with 02 nos. valve at end will be jointed on 09 nos. down take of 25 nb pipe after 25 nb valve. Pipe line will be supported with MS Angle 65X65X6mm and U-Bolt.
- 3.10 Installation of 03 nos. down take as per sketch given above of 15 nb pipe for MDP (Moisture drainage point) with 15 nb valve. Pipe line will be supported with MS Angle 65X65X6mm and U-Bolt.
- 3.11 Installation of 05 nos. FRL points nominated by consignee at 09 down takes of 20 nb.
- 3.12 Commissioning of all components compressed air pipe line system, the desired performance of the system shall be demonstrated by the contractor for at least two working days (02 shifts each). The pipe line shall be handed over to CRWS for trial operation for 30 days. On successful completion of such trial, commissioning certificate shall be issued by CRWS Bhopal, provided, all necessary obligations of the contract on the part of the contractor are met and the payment for this part will be made after completion of this part.

C. Supply of all materials required for erection & commissioning of Compressed air Pipe line of Paint Shop as per section – C, and drawing Sketch given in Annexure-2.

- i. List of material for Paint Shop – section ‘C’
- ii. Sketch no. MW/Pn. Pipe line/Paint/CRWS

- 3.13 Extension of existing compressed air pipe line with 80 nb pipe valve and laying of 80 nb pipe line with using at least 07 pair of flange for connection. Starting with 80 nb valve, Quantity 01 nos. Pipe line will be supported with MS Angle 65X65X6mm and U-Bolt.
  - 3.14 Installation of 05 nos. down take of 25 nb pipe with a valve of 25 nb of 05 meter length. Pipe line will be supported with MS Angle 65X65X6mm and U-Bolt.
  - 3.15 Installation of 02 nos. C-Section bended pipe of 20 nb with 02 nos. valve at end will be jointed on 05 nos. down take of 25 nb pipe after 25 nb valve. Pipe line will be supported with MS Angle 65X65X6mm and U-Bolt.
  - 3.16 Installation of 01 nos. down take as per sketch given above of 15 nb pipe for MDP (Moisture drainage point) with 15 nb valve. Pipe line will be supported with MS Angle 65X65X6mm and U-Bolt.
  - 3.17 Installation of 05 nos. FRL points nominated by consignee at 05 down takes of 20 nb.
  - 3.18 Commissioning of all components compressed air pipe line system, the desired performance of the system shall be demonstrated by the contractor for at least two working days (02 shifts each). The pipe line shall be handed over to CRWS for trial operation for 30 days. On successful completion of such trial, commissioning certificate shall be issued by CRWS Bhopal, provided, all necessary obligations of the contract on the part of the contractor are met and the payment for this part will be made after completion of this part.
- D. Supply of all materials required for erection & commissioning of Compressed air Pipe line of Carpentry & ETL Shop as per section – D, and drawing Sketch given in Annexure-2.

- i. List of material for Carpentry & ETL Shop – section ‘D’
- ii. Sketch no. MW/Pn. Pipe line/Carpentry& ETL/CRWS

- 3.19 Extension of existing compressed air pipe line with 80 nb pipe valve and laying of 80 nb pipe line with using at least 20 pair of flange for connection. Starting with 80 nb valve, Quantity 02 nos. Pipe line will be supported with MS Angle 65X65X6mm and U-Bolt.
- 3.20 Installation of 09 nos. down take of 25 nb pipe with a valve of 25 nb of 05 meter length. Pipe line will be supported with MS Angle 65X65X6mm and U-Bolt.
- 3.21 Installation of 02 nos. C-Section bended pipe of 20 nb with 02 nos. valve at end will be jointed on 09 nos. down take of 25 nb pipe after 25 nb valve. Pipe line will be supported with MS Angle 65X65X6mm and U-Bolt.
- 3.22 Installation of 02 nos. down take as per sketch given above of 15 nb pipe for MDP (Moisture drainage point) with 15 nb valve. Pipe line will be supported with MS Angle 65X65X6mm and U-Bolt.
- 3.23 Installation of 04 nos. FRL points nominated by consignee at 09 down takes of 20 nb.
- 3.24 Commissioning of all components compressed air pipe line system, the desired performance of the system shall be demonstrated by the contractor for at least two working days (02 shifts each). The pipe line shall be handed over to CRWS for trial operation for 30 days. On successful completion of such trial, commissioning certificate shall be issued by CRWS Bhopal, provided, all necessary obligations of the contract on the part of the contractor are met and the payment for this part will be made after completion of this part.

#### **4.0 Railway Scope of Work:**

- 4.1 Electricity, compressed air and raw water will be provided by CRWS in "as available condition" FREE OF COST. However the Contractor is requested to use these resources judiciously avoiding wastage.
- 4.2 Contractors labours will be permitted to utilize the existing facilities of toilets, drinking water, rest room available in CRWS, Bhopal. No additional facilities will be provided by the Railway Administration.
- 4.3 Railway will provide suitable space for storage of contractor's material brought for execution of the work free of cost.

## **5.0 Special Conditions of the Contract**

5.1 Tenderers are advised to make a visit to the site where the Compressed air pipe line system is required to be installed before participating in this tender to ensure proper assessment for project execution and the work content along with day wise milestone chart.

5.2 The Contractor shall submit an activity chart showing the schedule of the work planned along with the tender schedule.

5.3 For reference a sketch has been provided by CRWS. On the basis of it, the Contractor shall provide his planning of work duly including details such as-

- a) Proposed pipeline layout including main supply lines from the nearest available source, before commencement of erection work on site.
- b) Details of drop lines planned.
- c) Material schedule (item description in full quantity proposed etc. planned for the work).
- d) IS specification for the individual items planned, weld joint details, leak and pressure testing procedures applicable.
- e) Copy of the IS specifications referred.

5.4 Nil

5.5 All the materials supplied for the subject work shall be in accordance with the relevant standards/ specification as mentioned in the schedule as per section- 'A to D'.

5.6 The header pipelines shall be taken along the longitudinal array of main structural pillars of the shop at a height of minimum 6 meters from the ground level and shall be mounted on to the pillars with suitably fabricated supports.

5.7 All drop lines shall be secured properly with suitable clamps/ supports to the pillars with minimum bends, routed in such a way to provide necessary protection from any impact/ damage from materials being handled in the shop floor and to avoid any EOT crane movements that could come up at a later stage.

5.8 All the drop lines shall terminate at a height of 1.5 meters from the ground and all the valves and connector points shall be easily accessible from the ground for easy operation of the same.

5.9 Features of all drop points for all the Compressed air pipe lines shall be uniform throughout and all similar material/ hardware shall be of similar specification, construction and make and shall be easily available in the market.

5.10 Before the demonstration of the performance of the system after installation, all the pipelines shall be pressure tested in accordance with the relevant IS standards and all other relevant rules applicable to such gas pipelines and its application. In absence of any standard test procedure, the pipelines shall be tested atleast at 1.5 times the working pressure.

5.11 Welding Machines, Gas Welding Plant and Electrodes for all type of welding and gases for gas welding shall be arranged by the Contractor at his own cost.

5.12 All Compressed air pipelines, fittings, erected structures and securing arrangements shall be given anti corrosive treatment by painting with red oxide zinc chromate primer to IS: 2074 1992 followed by synthetic enamel exterior paint to IS: 8662 1998 in Synthetic Enamel Paint (Saiten Blue) colour for identification as per National Safety council regulations/Duly approved by the competent authority (WCR officials).

5.13 All the equipments and pipelines should be selected and erected in such a way that it shall facilitate carrying out inspection, cleaning, replacement and repairs.

5.14 The pipelines shall be properly secured and laid at safe distance from Power cable, OHE Cranes & DSL, Jib Cranes etc.

5.15 Contractor shall ensure that the routine work of shops should not hamper during installation and commissioning of gas pipelines in shop.

5.16 The contractor shall be responsible for proper disposal of off cuts/ scrap generated & debris etc. if arises, during execution of the work, at no extra cost.

5.17 Any tools/ tackles/ fixtures/ machines etc. required for erection & commissioning of pipeline/ Compressed air pipe line system will be in scope of contractor and while taking these inside the premises of CRWS, the same should be endorsed/ declared to security personnel at main gate and SSE concerned to facilitate the process for taking these items back.

5.18 The conditions of contract contained herein shall be supplemented to the Indian Railway Standard Conditions of the contract and Tender Schedule Booklet. In the event of any conflict or inconsistency between them, conditions of contract contained in Indian Railway Standard Conditions shall prevail.

5.19 The successful Contractor shall ensure that the labour employed by him inside the factory comply with all instructions given by the Safety staff on duty.

5.20 The successful Contractor shall maintain close Co-ordination with the engineer in-charge of the work so as to ensure the work is in progress according to the Contract schedule.

5.21 It is to be ensured by the contractor that good workmanship is put in by his staff while installation of all the components of the complete compressed air pipe line system. Symmetry, alignment of pipelines, their supporting structures, firm clamping arrangements, leak proof threaded joints & welded joints etc. shall be ensured. In case any deficiency in any of these areas is pointed out later during final inspection stage, the same shall be required to be rectified up to the satisfaction of the inspecting officer without any extra cost.

5.22 The entire work shall be carried out under contractor's technically qualified Engineers and expert supervisors. The Administration shall have the power to direct the contractor to engage sufficient number of people, if it is felt that the contractor's execution and supervising arrangements are insufficient for the successful completion of the work as per schedule.

5.23 All safety rules/ factory act prevalent in the premises of CRWS/BPL will have to be followed by the staff deployed for installation & commissioning of Compressed air pipe line system.

5.24 The staff deployed must bear a photo I-card issued by the supplier company, based on which CRWS can issue gate pass for entry/exit to/from CRWS/Bhopal.

5.25 Wherever electrical shutdown is required for safe working, prior work permit should be obtained before commencing the work in consultation with the SSE nominated for this purpose.

5.26 Normal working hours permitted for working at CRWS premises will be from 08.00 hrs. to 17.00 hrs. on all working days. For working on holidays/Sundays prior permission may be sought from CWM/CRWS/Bhopal.

5.27 Contractor shall be responsible for the discipline of the men engaged by him inside the CRWS area and ensure that the labourers employed by him are confined to their places of working and shall not go around the workshop.

5.28 The successful Contractor shall ensure that the labour, equipment and materials comply with all the provisions of Madhya Pradesh Factories act and all other relevant rules and regulations applicable for this factory.

5.29 The safe custody of the materials supplied, rests with tenderer till they are fixed, erected in position and finally handed over to CRWS Administration.

5.30 The Contractor should make his own arrangements for the required vehicles such as lorries, mobile cranes etc., other tools, plants, machinery like portable tools, welding & gas plants, consumables and other accessories for the expeditious progress of work.

5.31 The contractor shall be responsible to see that the work executed by their staff, does not in any way infringe or damage the existing structures or other works in that area. The contractor is liable for paying the cost of damage if any caused to the Railways/CRWS property during the execution of their work.

5.32 Conditions related to entry and work permit system are as under:

5.32.1 Once the Purchase Order is issued to the successful Contractor, the Contractor shall apply in a prescribed format to obtain proper entry and work permit for the period of contract from CRWS authorities.

5.32.2 The display board containing the details of nature of work, maximum number of staff working per shift, period of work, site in charge name and phone number and main office phone numbers is to be placed at prominent place near the area of work.

5.32.3 If total staff engaged on any day of the contract period is 20 or more, Contractor has to register with Central Labour Commissioner Bhopal and obtain license from them. The copy of which shall be submitted with the Engineer-in-charge for this tender before starting the work.

5.32.4 Contractor's staffs deployed at CRWS shall be insured during the work period, evidence on support of the same shall be submitted with the Engineer-in-charge for this tender before starting the work.

5.32.5 The supervisor deployed by the contractor must ensure that:

- a) Hand operated electrical tools are to be properly earthed and should not have any livewire.
- b) Always use three way plug supply for connecting the electrical appliances.
- c) Suitable platform ladders are to be used while performing work at height.(All instructions of CRWS Safety cell will be binding)
- d) All instrument used for the work is to be complied with IE rules.
- e) Staffs under your control should wear the personal protective equipment such as safety shoes, safety helmets, hand gloves, safety harness, hand screen, safety net etc. as per working condition to prevent injuries.
- f) The Factories Act – 1948 and Madhya Pradesh Factories Rules - 1950 & Contract Labour (Regulation & Abolition) Act, 1970 are to be followed.
- g) The terms and conditions as laid down by the Madhya Pradesh Pollution Control Board are to be strictly followed.

- h) Suitable ladders/ scaffolding are to be used for climb up.
- i) Activities other than the specified activities as per the contract clauses, which are assigned to you, are not permitted at our premises.
- j) Ensure the Suitable guards are provided to the hand operating machine.
- k) In case, any accident occurs during the work, the supervisor deployed by the contractor shall report immediately to the Chief Safety Officer, CRWS Bhopal. However, if any injury is caused to contractor's staff, the contractor will be responsible for arranging the necessary first aid/ treatment at his own expenses.
- l) Suitable lifting machineries and tackles are to be used to handle the materials.
- m) Off cuts and wastes scrap generated during the course of your work must be suitably disposed to the designated dumpsites as directed by the engineer in charge.
- n) The supervisor nominated for work will take every day permission to work at height with SSE, Concerned, SSE, Millwright & SSE, Sub-Station. He also ensured that staff provided for work at height should be properly trained and medically fit to work at height.

5.32.6 Any loss caused to CRWS because of negligence/ ignorance on the part of contractor shall be recovered from the contractor.

5.32.7 The equipments & materials stored inside CRWS premises will be at contractor's own risk.

5.32.8 Factory Manager/ Occupier is fully empowered to stop the work if any safety instructions/ conditions/ precautions/ procedures is violated by the contractor's staff.

- 5.32.9 Any claim arising/ necessary compensation to the victim/ relative of the victim/ legal expenditure cost (if any) arising due to any accident (fatal/ causing disability to contractor's staff/ causing damage) while working inside CRWS premises due to negligence/ ignorance on the part of the contractor/ contractor's staff, shall be borne by the contractor.
- 5.32.10 On every day during the currency of contract the contractor/ or his supervisor shall report to SSE in charge of the work and also shall obtain clearance from Electrical & Mechanical Department (if necessary). At the end of the day, the contractor or his supervisor shall submit a brief report on the days work to the respective SSE's in charge of the work.
- 5.32.11 Initially permit will be issued for one week only. The renewal of permit will be issued only on the basis of compliance of the said rules, regulations, conditions and safety norms by the contractor's staff during the first week.
- 5.32.12 The Contractor shall be required to give an undertaking to the engineer-in-charge of this tender that all the safety norms mentioned in special conditions of the tender will be followed by the contractor's supervisors and staff while working inside CRWS premises.
- 5.32.13 The list of material given in Section ' A, B, C & D' is indicative, since it is a supply & commissioning contract, the responsibility of completing the Compressed air pipe line system and demonstrating its use is with the contractor on turn key basis.
- 5.32.14 The contractor should indicate any additional requirement, if any for completing the installation Compressed air pipe line system in his bid otherwise any shortfall in material will have to be made good by contractor at his own cost or added in labour cost. Contractor will have to replace these items at its own cost.

5.32.15 Tenderers are advised to visit CRWS, Bhopal at any time during the office hours to see and understand the details and the nature of work before filling the tender. The details of the works can also discuss with concerned official/officers of CRWS, Bhopal at any time during the office hours and can also see the drawing if required.

5.32.16 If tenderers have any doubt about the general and special terms and conditions of the tender, the same should be got clarified from this office before submission of tender. Post tender interpretations will not be accepted by Railway Administration. This may please be noted.

5.32.17 The offers submitted should be valid for 90 days from the date of submission.

5.32.18 Tenders must be filled in ink or typewritten. No erasures, alterations or over writing is permitted on the Tender form. The language used in filling the tender forms must be clear and precise.

## **6.0 General Instruction to Contractor:**

The successful tenderer shall comply with all relevant statutes of Government including Contract Labour (Regulation and Abolition Act 1970 and Central rules 1971) and obtain license from ASSISSTT. LABOUR COMMISSIONER or the Competent authority empowered issues such license. Any failure on the part of the successful tenderer in this regard will be at his risk and consequence. He should comply workman's compensation act 1923, payment of wages act 1936, Minimum Wages Act 1948. Employees State Insurance act, Provident Fund Act, Employment of children Act, Un-touchable act and other Labour Laws, The successful tenderer shall also indemnify the Railway Administration against any claim / liabilities under these acts that may occur to the contractor's labours and servants due any reasons whatsoever. (GCC Part-II, clause No. 3 AND 54 to 60.)

**6.1** Contractor and his staff will ensure all the rules prescribed in Factory Act –1948, while working inside workshop.

**6.2** The contract shall be governed by the law for the time being in force in the Republic of India. (GCC Part-II, clause No. 3 AND 54 to 60.)

6.3 i) General instructions to contractors for ensuring safety of their workmen while working in CRWS, Bhopal's premises in respect of Factory Act. 1948 are attached for compliance.

ii) Contractor is responsible for safety of his staff under the provisions of Factory Act. 1948. The contractor is also responsible to supply personal protection equipments (PPE) to his staff and no additional charges are claimable for the same. All the safety & healthy related equipments required for the employees deployed by the firm shall have to be provided by the contractor.

iii) The Railway shall not be responsible for any accident that may occur to contractor's labours/servants for any reasons whatsoever. The contractor will himself ensure the safety of his workers and shall be liable to pay claims, whatsoever if made by the contractor labour. Railway will not carry any responsibility of such payments.

## **7.0 Inspection and Certification**

7.1 All the material supplied shall be accompanied by test certificate issued from test houses approved for the purpose by the government/ test certificate issued by original manufacturers and all the material supplied shall be pre-inspected by RITES before delivery.

7.2 All the measuring equipments supplied must accompany calibration certificate issued by the original manufacturer/ NABL accredited laboratories.

7.3 Final inspection will be done by SSE MillWright Shop or representative nominated by Railway Administration in the Inspection shop between normal working hours. The decision of inspecting authority would be final & binding on the contractor.

7.4 For the purpose of this contract, In-charge officer of Millwright Shop will be the nodal authority. All written correspondence in respect of this contract should be addressed to the Railway Administration through WM (M) only. SSE MillWright shop is authorized supervisor for this contract.

## **8.0 Completion period**

8.1 The period of completion for this work is 180 days (One Hundred & Eighty days) from the date of issue of purchase order unless there is any delay on railway's account.

## **9.0 Warranty**

9.1 The complete Compressed air pipe line system supplied and installed by the Contractor should be warranted for a period of 30 months after their delivery or 24 months from the date of placement in service whichever shall be sooner. The warranty will be applicable as per IRS code clause 3200.

## **10.0 Special commercial condition**

10.1 Payment of Sixty Five percent (65%) of the total value of the each part of contract will be made after supply of the materials and acceptance by the consignee (i.e. Receipt and physical verification of the material for condition & quantity).

10.2 Payment of Twenty Five percent (25%) of the each part value of the contract will be made after completion of installation and commissioning of all the works mentioned in each part as given in Scope of Work for part A, B, C & D.

10.3 Payment of Remaining Ten percent (10%) of the total value of the contract will be made after successful commissioning of the system and after submission of Bank Guarantee of the value equivalent to 10% of total value of the contract amount which should be valid up to six months claim period after completion of the warranty period.

## विशेष अधिसूचना

सर्व संबंधित को सूचित किया जाता है कि कारखाना अधिनियम 1948 तथा म.प्र. शासन कारखाना नियम 1962 तथा विभिन्न औद्योगिक व श्रम कानूनों का पालन सुनिश्चित करना समस्त रेल कर्मों, ठेका श्रमिक व अन्य आगंतुकों का आवश्यक दायित्व है।

सर्व संबंधित की जानकारी हेतु सूचना निम्नानुसार है।

- i. सभी ठेकेदारों/आपूर्तिकर्ता/स्केपक्रेता का यह दायित्व है कि वे ठेके के संबंध में भारत सरकार व म.प्र. शासन द्वारा बनाये गये समस्त कानूनों का पूर्ण रूप से तथा कड़ाई से पालन करेंगे।
- ii. श्रमिकों की सुरक्षा को समस्त ठेकेदार/ आपूर्तिकर्ता/स्केपक्रेता सर्वोपरि महत्व देंगे एवं उनका दायित्व होगा कि वे सुरक्षा नियमों का पूर्णतयः पालन करें व ऐसा कोई कार्य न करें जिससे किसी भी श्रमिक की सुरक्षा को किसी भी प्रकार का खतरा उत्पन्न हो।
- iii. सडिपुका/भोपाल के कर्मचारियों/अन्य सभी विभागों के रेल कर्मों के अतिरिक्त किसी भी ठेका श्रमिक या अन्य आगंतुकों हेतु गेट पास आवश्यक है। गेट पास जारी करने हेतु वांछित जानकारी ठेकेदारों/आपूर्तिकर्ता/स्केपक्रेता फ़र्म की ओर से निर्धारित प्रारूपों में दी जानी अवश्यक है। विभिन्न श्रेणी के गेट पास हेतु निर्धारित प्रारूप क्र. 1 से 6, **6A, 7, 7A, 8, 9** सुरक्षा कार्यालय में निशुल्क उपलब्ध है। किसी भी स्थिति में वैद गेट पास के बिना कारखाने में प्रवेश रेल धाराओं के अनुसार दंडनीय अपराध है।
- iv. सभी ठेकेदार/आपूर्तिकर्ता/स्केपक्रेता यह सुनिश्चित करें कि उनके सभी श्रमिकों का स्वास्थ्य ठीक हो तथा अस्वस्थ श्रमिक को कार्य पर न लगायें।
- v. सडिपुका परिसर में 18 वर्ष से कम उम्र के ठेका श्रमिकों का प्रवेश वर्जित है। सभी ठेकेदार/आपूर्तिकर्ता/स्केपक्रेता का यह दायित्व है कि उनके द्वारा कार्य पर रखे गये किसी भी ठेका श्रमिक कि आयु 18 वर्ष से कम न हो। यदि किसी ठेका श्रमिक कि आयु 18 वर्ष से कम या उसके आस पास लगती हो तो ऐसे ठेका श्रमिक का जन्म/आयु प्रमाण पत्र प्रस्तुत करना अनिवार्य है। तथा यदि आयु का कोई वैद प्रमाण पत्र नहीं है तो किसी एम.बी.बी.एस.(M B B S) चिकित्सक से आयु संबंधी जांच का प्रमाण पत्र जिसमे यह स्पष्ट उल्लेख होना चाहिये की "जांच किये गये" ठेका श्रमिक की उम्र 18 वर्ष या उससे अधिक है।
- vi. ठेकेदार/आपूर्तिकर्ता/स्केपक्रेता के सामग्री वाहनों के चलने हेतु ट्रांसपोर्ट वाहन चलाने का लाइसेंस रखने वाले चालकों की नियुक्ति व उपलब्धता सुनिश्चित करें।
- vii. सभी ठेकेदार/आपूर्तिकर्ता/स्केपक्रेता सुनिश्चित करें कि यदि उनके कार्य में क्रेन ऑपरेशन अवश्यक है तो क्रेन का फ़िटनेस तथा सुरक्षित होने का प्रमाण पत्र म.प्र. कारखाना नियमानुसार सक्षम व्यक्ति से प्राप्त करें, तथा केवल क्रेन चलाने योग्य ऑपरेटर को नियुक्त करें क्रेन के चालक की उम्र यदि 45 वर्ष से कम है तो वर्ष में एक बार तथा यदि 45 वर्ष या उससे अधिक है तो वर्ष में दो बार तथा क्रेन ऑपरेटर का नेत्र द्रष्टि परीक्षण नेत्र चिकित्सक से कराया जाना अवश्यक है।
- viii. सभी ठेकेदारों को अपनी साइट पर एक फ़र्स्ट एड बॉक्स तथा एक फ़र्स्ट एड प्रशिक्षित श्रमिक रखना आवश्यक है।

उपरोक्तानुसार सभी नियमों का पूर्णतया पालन करते हुये समस्त ठेकेदार/आपूर्तिकर्ता/स्केपक्रेता निम्नलिखित साधारण नियमों का इस कारखाने में पालन सुनिश्चित करेंगे व इसका पूर्ण ज्ञान श्रमिकों को कार्य पर लेने के पूर्व बताना सुनिश्चित करें।

1. अपने श्रमिकों की समयानुसार उपस्थिति , नियमों का पालन, सुरक्षा उपकरणों का उपयोग, शॉप के अभियंताओं से अनुमति व अन्य समन्वय के लिये प्रत्येक ठेकेदार अपना एक अभियंता सक्षम प्रतिनिधि कारखाने में सदैव तैनात रहेगा। यह प्रतिनिधि अपने श्रमिकों को कार्य स्थल पर लाने , सुरक्षित तरीके से कार्य करवाने तथा कार्य समाप्ति पर प्रत्येक श्रमिकों को निर्धारित मार्ग से कारखाने से बाहर ले जाना सुनिश्चित करेगा।
2. किसी भी शॉप में कार्य प्रारंभ करने से पूर्व उस शॉप के वरि.अनु.अभि. को सूचना दिया जाना अति आवश्यक है। इसके बगैर किसी भी स्थिति में कोई भी कार्य प्रारंभ न किया जाये।
3. कोई भी ठेका श्रमिक कारखाना परिसर में बिना जूते पहने प्रवेश नहीं करेगा।
4. कोई भी ठेका श्रमिक निर्धारित मार्ग के अलावा अन्य किसी भी मार्ग पर आवागमन नहीं करेगा। ठेका श्रमिक कार्य स्थल पर जाने हेतु बाहरी रास्ते का प्रयोग करेंगे तथा किसी भी शॉर्टकट मार्ग का प्रयोग पूर्णतः प्रतिबंधित है।
5. अपने कार्य स्थल के अतिरिक्त अन्य शॉप में किसी भी स्थिति में ठेका श्रमिक का जाना प्रतिबंधित है।
6. शंटिंग के दौरान रास्ते से आना जाना पूर्णतः प्रतिबंधित है।
7. किसी भी ठेका श्रमिक का कारखाना परिसर में निर्धारित समय के पश्चात रुकना पूर्णतः प्रतिबंधित है।
8. कार्य के दौरान ठेका श्रमिक पूरे सुरक्षा उपकरणों का उपयोग करेगा एवं किसी स्थिति में सुरक्षा उपकरणों के बगैर कार्य प्रारंभ नहीं करेगा।
9. कार्य सदैव उचित औजारों से व पूर्ण सुरक्षित विधि से कराये जाने का पूर्ण उत्तरदायित्व संबंधित ठेकेदार का रहेगा।
10. कारखाने में कार्य के दौरान कोई भी श्रमिक किसी भी मशीन/यंत्र में एवं विद्युत बोर्डों से किसी प्रकार की छेड़ छाड़ नहीं करेगा। मरम्मत/असमंजस/सहायता चाहने की स्थिति में संबंधित अभियंताओं से संपर्क किया जाये व उनके आदेशों के अनुसार कार्य प्रारंभ किया जाये।
11. अपने कार्य के संबंध में किसी भी प्रकार की कठिनाई की स्थिति में उस ठेके से संबंधित अभि. या कार्यरत शॉप अभि. से संपर्क किया जाये। यह हर स्थिति में सुनिश्चित किया जाये कि जानकारी के अभाव में या त्रुटिवश किसी भी सुरक्षा नियम की अवहेलना न हों।
12. आठ (8) फिट से अधिक ऊँचाई पर कार्य हेतु ऊँचाई पर कार्य के परमिट व अन्य नियमों का पालन सुनिश्चित किया जाये।
13. खुदाई कार्य हेतु भी वर्क परमिट पालन सुनिश्चित किया जाये।
14. किसी भी ठेका पर्यवेक्षक, ठेका श्रमिक का बीमारी, चोट लगे होने या नशे की हालत में कारखाने में प्रवेश प्रतिबंधित हैं। इसका पालन सुनिश्चित किया जाये।